

INDEX OF SURGICAL PROGRESS.

GENERAL SURGERY.

I. Malignant Anthrax. By Dr. A. Bois. M. B., æt. 65, a robust man of sanguine temperament, living in good hygienic surroundings, but recently much harassed, had for long carried a subcutaneous cyst, as large as a fowl's egg, at the lower part of the nape of the neck. After the fatigues of a long journey, a part of the skin covering the cyst became red and rather painful. As inflammation and suppuration threatened, he submitted to the removal of the cyst. Early in October an incision, several centimetres in length, was made, and the grumous, greyish, semi-liquid, foetid sebaceous contents removed. The interior of the sac was carefully cleaned, cauterized with a nitrate of silver pencil, and filled with plugs of lint. By degrees suppuration was established, and the cavity was again several times, and at sufficiently long intervals, cauterized, and fragments of the caustic left in the cavity, in order to ensure more certainly the exfoliation and adhesion of the secreting membrane. Towards the middle of November very little of the cavity of the cyst remained, but a small, hard and painful tumor appeared on the nape of the neck, a few centimetres above the part previously occupied by the cyst. It gradually developed and progressed towards the hairy skin, but not in the region of the cyst. It was evidently an anthrax, at first benign and developing slowly, and spontaneously suppurating after some days. It extended but little at the end of the month, and as it freely discharged under the influence of poultices, and gave but little pain, it was thought for some days that active intervention would not be needed. This abstention of active treatment seemed justified by the authoritative opinions expressed in 1881, at the Société de Chirurgie, in the discussion on the treatment of anthrax. Early in December the anthrax commenced to increase on the left side of the neck, at the same time mounting towards the scalp, and the regions

newly engaged began to take on a wooden hardness. The urine contained no trace of sugar. On the 5th of December it was ascertained that the centre of the tumor, for a space as large as a 5 franc piece, was boggy, and bled freely from numerous fine openings. It was the prelude of a serious slough, such as was seen several years ago in a similar case which rapidly terminated in death in spite of repeated and deep incisions. It was resolved to employ the thermo-cautery, after the method recommended by M. Verneuil—a plan which controls the hæmorrhage and modifies the development of the disease, more effectually than the incisions made with the bistoury. Twelve deep incisions, diverging in the form of a fan, were made under chloroform, with the instrument at a dark red heat. The limits of the affection being reached but not passed by the incisions. The anthrax, however, continued its invading growth, and on the 8th of December the cautery was again used. The incisions were prolonged 1 or 2 centimetres beyond the margin of the disease and this time its encroachment was definitely stopped. In the following days fragments of slough separated with abundant suppuration, and exposing a red and granulating surface. For some days sulphocarbonate dressings were used. The day after the second operation attention was called to a new focus of suppuration, which was rapidly developing in the middle of the dorsal region, and with a surrounding induration already reaching 5 or 6 centimetres in diameter. The patient was again chloroformed and eight or ten deep radiating lines were traced with the thermo-cautery, each one 8 or 10 centimetres in length. Here the effect was instantaneous. The second focus did not further develop, and the sore left by the operation took on a healthy aspect. But the infection of the system was not arrested. On the 10th of December a hard and painful swelling was manifest beneath the right deltoid muscle, without change of color of the skin. To combat it with the thermo-cautery did not seem possible, and tonic treatment had to be relied on. The deep inflammation extended and reached the inner part of the arm. The fever became more pronounced, and on the 15th deep fluctuation could be observed at the right deltoid. An incision gave issue to blood mixed with some threads of pus. The suppuration became well established by the in-

cision, and there was some temporary arrest of the general condition, as well as a rapid subsidence of the swelling. Death, however, ensued on the 21st of December.

Two facts are evident from this case: (1), that the thermo-cautery has an incontestible power in stopping the progress of anthrax, even when malignant, provided that it be used beyond the limits of the disease; (2), that an anthrax may for some days maintain a benign course, increasing insidiously and causing a false security, and then taking on suddenly the serious character of a disease beyond our resources in consequence of the septicæmia which it engenders.—*Progres Med.* Oct. 1885.

P. S. ABRAHAM (London. ;

II. On Transfusion and Infusion. By Dr. LANDERER (Leipzig). Since 1880 L. has been investigating this subject experimentally and clinically. Alkaline salt solutions produce only transitory improvement where the loss of blood has been great, more than $4\frac{1}{2}\%$ of the animal's weight. A patient thus treated died one and a half hours later of a second collapse.

L. then used a mixture of one part defibrinated blood to $\frac{3}{5}$ parts alkaline salt solution, with better results. Loss of blood up to 5% might then be quickly recovered from. In a case of severe poisoning with nitro-benzol Thiersch let 900 cc. blood and replaced it by 1,000 cc. of this mixture, with a successful result—no fever or other customary sequelæ. The lesser amount of fibrin ferment introduced makes this method safer than when all defibrinated is employed.

Since, however, recent investigators all pronounce against the use of blood at all, he has sought some substitute. Very favorable results were obtained by adding 3% of cane sugar to the alkaline salt solution. Animals repeatedly bled until only $1\cdot1\frac{1}{2}\%$ of body weight in blood remained recovered rapidly and replaced the loss—as shown by counting the blood corpuscles—in an unusually short time (about fourteen days). Hæmorrhage in one patient was successfully treated by an infusion of 300 cc. This sugar salt solution has several advantages. It supplies a quickly available nutrient material, draws fluids with much

energy into the circulation from the surrounding tissues, has greater consistency, and increases the blood-pressure materially. In animals poisoned by nitro-benzol, chloral, chloroform, L. made a depletory venesection, and by infusing this mixture kept them alive—control animals dying. In cholera it would appear to be counterindicated. It is theoretically important that in poisoning it is not at all necessary to supply oxygen-bearers—red corpuscles.—Report of XV Congress of German Surgeons in *Centbl. f. Surg.* 1886. No. 24.

W. BROWNING (Brooklyn).

VASCULAR SYSTEM.

I. On Compression of the Innominate Artery. By Prof. THOMAS ANNANDALE (Edinburgh). Man, æt. 53, while lifting a heavy weight felt something give way at the root of his neck, and the same evening a pulsating swelling was noticed above the centre of his right clavicle. This occurred in April, 1884. On the 27th of May, 1885, the innominate was exposed by a median cervical incision so as to allow the finger to pass behind the vessel and press it against the sternoclavicular joint. An india rubber drainage tube half an inch in diameter was introduced and so adjusted that one end lay behind the artery and the other protruded from the wound. The intention was to leave the tube in position until the tissues had become accustomed to its presence and until the risk of a septic condition of the wound was diminished, and when the latter condition had been obtained, to introduce the small blade of a compressor, which Mr. Annandale had devised, into the drainage tube, and carry on compression of the artery more or less continuously, according to the effect produced. On the 7th of June, however, there was some blood on the dressing. Next day there was profuse bleeding and the artery was compressed by the finger. Several attempts to pass a ligature between the bleeding part and the aorta failed, but the compressor was applied and the bleeding stopped. The patient died in five hours. The innominate was found to have ulcerated just below the bifurcation from pressure of the tube, and the trachea showed signs of commencing absorption. The author thinks that in future compression might be applied by the finger, or an instru-

ment, through an incision, while the patient was under an anæsthetic. Such compression should not be too continuous and should be combined with distal ligature or compression, or if thought advisable, electrolysis.—*Lancet*, March 13, 1886. [See an account of ligature of the innominate by the reporter in the American Encyclopedia of Surgery, or, with a report of all cases, in *Brit. Med. Journal*, October 14, 1882.

II. Popliteal Aneurism in an Ataxic Subject Cured by Pressure. By Dr. LONGHURST (London). Patient, æt. 51. An Es-march's bandage was applied to the limb for an hour and a half; then a screw tourniquet to the femoral, and so on during the day. Pressure was omitted at night. A shot bag weighing 11 $\frac{1}{4}$ pounds was tried instead of the tourniquet, and this treatment was pursued for the next two days. On the evening of the third day no pulsation was visible. The pulsation did not return.—*Med. Press and Circular*. March 31, 1886.

III. Traumatic Inguinal Aneurism. By C. MANSELL MOUL-LIN (London). Man, æt. 34. Four weeks before admission received blow in the groin from edge of flat piece of iron. Swelling and discoloration followed and disappeared, but three weeks later the swelling recurred and continued to increase. During an effort, immediately before admission, he was seized with violent pain and a large pulsating tumor made its appearance in the groin, extending into the scrotum and perineum. An abdominal tourniquet was applied and the swelling opened over the femoral artery, in which a slit was found immediately below Poupart's ligament. The artery was tied below this point. The external iliac was then tied. The man recovered and pulsation could be detected in the posterior tibial four months later.—*Lancet*. March 6, 1886.

IV. Traumatic Aneurism Caused by Punctured Wound of Buttock. By JOSEPH LITTLEGOOD (Nottingham). Boy, æt. 16. Received accidental wound in left buttock posterior to great trochanter. A pulsating tumor was noticed on the fourth day and rapidly reached the size of a cocoanut. On the eighth day the wound was rapidly enlarged, but so great was the hæmorrhage that it was necessary to apply an abdominal tourniquet. The distal end of the artery

was found without difficulty and tied; the proximal end was found after a long search, just within the great sciatic notch. The patient recovered.—*Lancet*. March 27, 1886.

WM. THOMSON (Dublin).

HEAD AND NECK.

I. A Case of Cerebral Abscess Subsequent to Orbital Periostitis. By CRAWFORD RENTON, M.D., (Glasgow). The patient, a boy *æt.* 12, was admitted to the Glasgow Eye Infirmary suffering from symptoms of right orbital cellulitis, which had persisted for ten days. On the sixth day after admission a free incision was made along inner side of upper eyelid, a considerable quantity of pus was evacuated and drainage tube inserted. Four days afterwards the discharge had ceased, the swelling gone, and the patient had become almost convalescent. Two days after this note was made, however, he complained of severe pain in the head, intermittent in character, and most severe over the right temporal region. Vision normal; ophthalmoscopic examination showed a normal fundus. No evidence of any fresh formation of pus in the tissues around the eye, but the wound was re-opened and a probe passed along it, but without detecting any bare bone; the drainage tube was re-inserted. Ice applied to the head and small doses of calomel given internally. Pulse 64; temperature normal. The symptoms continued for some days, and vomiting set in. But ultimately the pain and vomiting subsided, and complete relief ensued. After, however, four days of relief, the symptoms again recurred and death subsequently took place, being preceded by spasms of the left side which rapidly became general. The temperature was never higher than 99° and the pulse varied from 76 to 52. Post mortem examination showed extensive necrosis of the right orbital plate, and an abscess occupying the anterior half of the right frontal lobe. There was no direct communication between the pus from the orbit and the cerebral abscess, and the dura mater was only inflamed over the necrosed portion of the orbital plate. The right eye was healthy. Two secondary diseases, the author remarks, follow suppuration in the orbit—meningitis and abscess. The diagnosis in this case was difficult, the symptoms pointing chiefly to meningitis.

H. PERCY DUNN (London).

II. On the Operative Treatment of Empyema of the Antrum Highmori. By J. MIKULICZ (Cracow). Heretofore in this affection the artificial opening, when needed, has been made through some point in the roof of the oral cavity. This method has the advantage of perforating the antrum at a point easily accessible and favorable for drainage. It has, however, disadvantages. The opening is not always permanent enough, since suppuration frequently lasts for months or years; and if a sufficiently wide opening is obtained bits of food pass in too easily and keep up the suppuration. The most rational procedure would be to re-open the natural passage into the nasal cavity as proposed long since by Hunter. Although this is hardly practicable yet it is not difficult to penetrate the antrum from the lower nasal passage at the level of the inferior turbinated bone and thus open a wide lasting communication with the nasal cavity. The inner wall is thin as paper at this point and can be easily bored through with a sharp cutting instrument. M. uses a special short-bladed stylet with a properly curved handle and a little flange to prevent the blade sinking in too deeply. This is passed into the nostril with the point downwards, and when at the inferior turbinated bone the point is turned outwards to get up around the bone. With a vigorous stab the antrum-wall is perforated and as much of a piece cut from it as possible. By preserving a direction downwards and forwards no harm can be done as the wall here becomes thicker, and resists the instrument. In this way a slit 5 to 10 mm. wide by 20 mm. long is produced. Too free hæmorrhage can be controlled by tamponing with iodoform-gauze for a day or two. After-treatment consists in washing out the antrum with a balloon-syringe having a nozzle bent like the above-mentioned stylet. M. finds the operation easy to execute on the cadaver. An abnormally narrow nostril or an overthick turbinated bone might be too great an impediment. This operation he has performed once successfully on a man æt. 33. The patient made the injections himself from the fifth day, twice a day for four weeks, and has remained cured now for six months.—Report of XV Congress of German Surgeons in *Centbl. f. Chirg.* 1886. No. 24.

W. BROWNING (Brooklyn).

III. Tonsillar Abscess, Œdema of the Glottis and Tracheotomy in a Child *Æt.* 1. Recovery. By Dr. F. KATTERFELD (Curland). Author reports following case: Male child, *æt.* $11\frac{3}{4}$ months, admitted in a state of great dyspnœa, which had developed after an attack of measles. On examining the cavity of the mouth both anterior palatal arches were found highly congested and swollen, as were also the tonsils. On these latter were yellowish brown crusts which were easily removed. Externally on both sides of the neck there was a large swelling, rather tough in consistency, in the region of the angle of the lower jaw. These phenomena were more fully developed on the left side. No œdema of the glottis. When pressure was made with the finger on the base of the tongue, there escaped from the anterior part of the left tonsil a quantity of yellowish, non-offensive smelling pus.

Respiration somewhat difficult. Slight febrile movement only. This condition was followed in a few days by great dyspnœa on inspiration, showing that the swelling, until then only subchordal in its character, had now involved the glottis. Cricotracheotomy, according to Schinzinger's method. After this the temperature rose slightly, but fell to normal in three days, and the swelling of the tonsils decreased steadily. No return of the glottis œdema. Appetite good and general condition much improved. This satisfactory course was interfered with, however, owing to the development of an acute catarrh with considerable febrile movement and return of the dyspnœa. The latter ceased after a quantity of bloody muco-purulent matter and granulation mass had been expectorated. A shorter and thinner canula was then introduced and applications of a $1\frac{1}{2}\%$ solution of arg. nitric. to the ulcerated spot in the larynx were made. Recovery soon followed.

Cases of tracheotomy with recovery in children under one year of age are very rare, G. Chaym having found not more than forty cases in searching through all the literature on this subject.—*Deutsch. Med. Wochenschrift.* No. 28. July 15, 1886.

IV. Two Cases of Stenosis of the Larynx as a Sequel to Typhoid Fever. By Dr. K. ORTH. Case I. Patient, male, *æt.* 42, suffered much in his childhood with articular rheumatism and

attacks of colic. Had a general tendency to bronchial catarrh, and eight years before had dysentery. About five months previous to his admittance, severe attack of typhoid fever, lasting ten weeks, during which some difficulty in breathing had developed. Since then several attacks of dyspnœa, which are becoming worse. Respiration labored. Voice rough and hoarse, not aphonic however. Pressure on the cricoid cartilage painful. On examination with the laryngoscope the mucous lining of the larynx found intensely injected and swollen. The glottis appeared much narrowed, and at about the level with the true vocal cords two congested and swollen prominences discovered. Tracheotomy superior at once undertaken. Examination again nine days later. Mucous membrane less swollen, but the stricture is about the same. On closing the canula patient could breathe but for a few seconds only through the mouth. On comparing the conditions during respiration and phonation, it was shown that the swellings causing the stenosis did not lie in the plane of the vocal cords, but lower down. Diagnosis was, therefore, perichondritis of the anterior portion of the cricoid, to which the previous attack of ileo-typhus, the pains on swallowing and on palpation of the parts, and finally the result of the laryngoscopic examination all pointed. Daily introduction of laryngeal catheters, the size being gradually increased, and applications of arg. nitric. to the swelled parts once or twice weekly. Insufflations of alum sufficed to allay any symptoms of irritation from the use of the catheters. In the course of a few months of this treatment, Schrötter's thick laryngeal catheter (No. 5) could be introduced. A few weeks after beginning the treatment patient was able to breathe for half an hour with closed canula, the stenosis being so much reduced. In ten months time he could work the whole day with the canula closed, but was obliged to have it open while sleeping. Canula was withdrawn about fourteen months after commencement of treatment. Voice was then clear and respiration perfectly easy.

Case II. Patient, girl æt. 19. Admitted in July, 1882. Typhoid fever in March, April and May of same year. About two weeks after commencement of this latter illness, pains in the neck and larynx set in, accompanied by difficulty in swallowing. After the disease had

subsided patient was in wretched physical condition. There was complete aphonia and occasionally pain in the larynx. Difficulty in breathing began about four weeks before seen. These attacks of dyspnoea are at times very bad. When admitted respiration labored. Stenosis-murmurs heard over whole chest. The following day sudden orthopnoea during meal. Sinapism gave some relief. Dyspnoea became so great, however that tracheotomy superior was undertaken. Examination with laryngoscope eleven days later. The left arytenoid cartilage and plica aryepiglottica very much swollen and cedematous. The two false chords overlap one another, covering every part below. In the anterior parts there protrudes between the false chords a smooth, round portion of tissue about the size of a pea. Attempt to use the larynx-sound was very painful and its introduction impossible. Scarifications of the left arytenoid cartilage and aryepiglottic folds. Patient discharged in October following. During the first few weeks of her subsequent treatment the throat was kept warm and cataplasms occasionally applied. Insufflations of alum made twice weekly. Under this treatment swelling and cedema of the parts became less. No signs of an abscess in the larynx were observed. At the beginning of March in the following year all inflammatory symptoms had subsided. On examination both arytenoid cartilages found normal, also the aryepiglottic folds. The false chords still swollen and the small protuberance of tissue between these still remains. Applications of arg. nitric. two or three times weekly to these parts. Cavity of the larynx appeared to be completely obliterated. In the following August sound passed for the first time. It was then ascertained that the cavity of the larynx was not obliterated as supposed, but its lumen reduced to a minimum. The introduction of catheters now ordered, together with the local applications. In October a very thin English catheter (No. 9) could be passed, and patient could breathe through this when canula was closed. In November (1883) patient was able to force some air through the larynx and say "good morning" in a croaking voice.

This treatment has been kept up ever since. In December, 1885, she was able to close the canula for fifteen to twenty minutes at a time. In speaking the help of the false chords is necessary and the voice is somewhat stronger. Patient is still under treatment.

The case was undoubtedly one of perichondritis of the arytenoid cartilages (principally of the left), and also of the cricoid.—*Deutsch. Med. Wochen.* No. 29. July 22, 1886.

C. J. COLLES (New York.)

ABDOMEN.

I. Surgical Intervention in Certain Cases of Biliary Calculus. By T. THIRIAR. The origin of biliary calculi has never yet been clearly explained. Dr. Thiriär holds that they only form where bile stagnates, and when from sedentary life, advanced age, or pregnancy the bile becomes less alkaline and so permits of a deposit of cholesterine. Thus they may only be expected to form in the smaller bile ducts when the main ducts are obstructed from any cause. In 6,000 post-mortem examinations made by Prot. Wchenkel, of Brussels, no instance was found of the formation of gall-stones within the liver. The gall-bladder is therefore taken as almost necessary for the formation of gall-stones, and its removal is held to be a radical cure against them.

The paper begins with a brief sketch of the history of cholecystectomy. Three cases then related. One was performed by Dr. Langenbuch, of Brussels, and was pronounced cured in nine days. The other two were done by Dr. Thiriär himself. One was practically healed in six days after the operation, in the other hysterical symptoms appeared in the patient before and after the operation: these subsided and in two or three months she was doing well. The subsequent history of these three cases is not related in detail, but they seem to have made good recoveries, and to have been afterwards relieved from all the previous attacks of biliary colic. In another place the author refers to the two first cases of the operation performed in July, 1882. Three years after, in July, 1885, the patients were in excellent health, except that one had been unable to shake off a habit of taking morphia, although the need for it had ceased.

Mode of operating. (1) For 48 hours before, the operating room is kept at a temperature of 30°C (86°F). (2). About one hour before the operation the patient receives an enema containing 1-2 grms. (1/4-

$\frac{1}{2}$ dr.) of laudanum, and 2-4 grms ($\frac{1}{2}$ -1 dr.) of chloral. The patient is bathed a few days before, and shortly before the operation the abdomen is washed first with soap and water, then with ether and carbolic lotion. During the operation a carbolic spray is used. The cut surfaces are washed with 1 to 1000 corrosive sublimate. Sponges are replaced by sublimated wool tampons; instruments and hands are disinfected. Incision follows outer border of right abdominal muscle (Rectus). Muscular fibers are cut transversely three fingers' breadth below false ribs. After adhesions with the colon are broken down, the gall-bladder is seen. The cystic duct is then isolated, ligatured with silk in two places and divided. The margins of the opening in the duct are carefully sewn together with fine sublimated silk. The gall-bladder is removed and the abdominal wound closed. Catgut stitches are used, and some stress is laid on the importance of uniting like structures together, thus peritoneum to peritoneum, fibrous and cellular tissue to fibrous and cellular tissue each to each. The shock of the operation is much lessened by the enema of laudanum and chloral, as the opium soothes and diminishes muscular sensibility, and the chloral specially lessens the irritability of the spinal cord. This enema is always used in the author's ovarian cases.

The operation of cholecystotomy is contrasted with that of cholecystectomy, and objections to the latter are examined. The difficulty of the latter operation is considered no obstacle, as it is no greater than any surgeon may be expected to overcome, and less indeed than that of ovariectomy and of hysterectomy. Neither is the larger extent of incisions considered of moment when antiseptics are used. As to danger, out of the 7 cases on record (5 by Langenbuch and 2 by Thiriar) there are no deaths which can be attributed to the operation; two of the patients died not long after their operations, but one death was the result of a cerebral tumor, and the other of ulceration of the bile duct from the presence of a calculus in it.

Is removal of the gall-bladder efficacious? From the view he holds of the origin of gall-stones Thiriar believes that it is. So far also as the cases go they confirm his opinion.

When should the surgeon operate? The gall-bladder should be re-

moved when efforts to hasten the flow of bile and to increase its alkalinity have failed to relieve attacks of biliary colic. Cholecystotomy is not to be used, because it does not make a radical cure, because if a ligature slips shortly after the operation bile might escape into the peritoncum, and because biliary fistula delays the cure and allows bile to leave the body.

If it were said that the presence of a gall-bladder is necessary, Dr. Thiriar would reply that some animals, such as the elephant and the horse have none; that from some animals it may be experimentally removed with impunity; and that in man it may be wanting, atrophied or obliterated without bad results.

Thus the indication for cholecystectomy is a frequent return of severe biliary colic which has resisted medical treatment.

When a calculus blocks the cystic duct and causes dropsy of the gall bladder, the distended bladder is to be aspirated, and, if this fails, it is to be excised. When the common bile duct is blocked, causing persistent jaundice, and when the diagnosis has been established, the abdomen is to be opened and an effort made to crush the stone through the walls of the duct, and failing this the duct may be incised to remove the calculus and the edges of the cut sewn up again. If this also fails Cholecystotomy is to be performed and an effort made to establish a biliary fistula into the intestine.—*Révue de Chirurgie*. March, 1886.

* CHARLES W. CATHCART (Edinburga).

II. On the Operative Treatment of Abscess of the Liver.
By DR. KARTULIS (Alexandria). In Thierfelder's collection of cases of abscess of the liver treated by operation we find that of 10 cases operated by Curtis; but two recovered; J. Clark operated in 13 cases with 8 cases of recovery, and only 6 of Murray's 17 cases were cured. Warring collected 81 cases of operation with but 15 cases of recovery, showing a mortality of 81%. De Castro reported that of 61 cases operated 27 died, or 44.26%. Heinemann (Vera Cruz) treated 2 cases by puncture, both with fatal results, and of 20 cases where Potain's aspirator was employed, but 2 recovered.

The introduction of antiseptic principles in surgery formed a new era in the treatment of this disease. Lister, in 1878, was the first to open an abscess of the liver with the knife, under the observance of antiseptic rules, the result being satisfactory. The reports of the hospitals in Egypt, however, do not show that the results of opening these abscesses under strict observance of antiseptic precautions are very much better than formerly, nor do the reports of English surgeons in India tend to encourage this mode of treatment, but rather recommend the use of the trocar.

The author considers these unfavorable results to be largely due to the retention of pus in the cavity of the abscess, through defective drainage, leading consequently to pyæmia, hectic fever, etc. To obviate this defect he was induced first in the following case, to undertake resection of the rib, thus giving free vent to the discharge, and undoubtedly thereby saving his patient.

The patient, a man, æt. 30, was healthy until 20 days before admittance, during which time he had had much distress in the region of the liver, with fever. Nothing showing the presence of an abscess formed, however, and a change of climate was advised. A month later he returned with undoubted symptoms of abscess of the liver. Puncture in the 6th intercostal space performed twice, there escaping each time about 500 c. cm. of pus. No improvement. Incision then made, giving vent to 400 c. cm. of pus. The cavity, 12 cm. in depth, washed out with a 2½% solution of carbolic acid, a drainage-tube introduced and antiseptic dressings applied. Although the patient's condition improved somewhat during the first few days after the operation, change for the worse set in, owing to defective drainage. Two weeks later, therefore, 3 cm. of the 7th rib was resected, giving vent to a large quantity of bad smelling pus. Recovery was then rapid, the cavity being completely closed 19 days later.

In the author's second case, the patient, æt. 30, had complained in the region of the liver for five weeks previous to operation. Liver found much enlarged and painful to touch. Patient very weak. Puncture with trocar in the 10th intercostal space, allowing the escape of 400 c. cm. of thick pus. Considerable relief was experienced by the

patient after this, and he was able to sleep for the first time in many days. No movement of bowels, and tenderness on pressure remained as before. Four days later puncture was again made, some 270 c. cm. of purulent matter escaping. Patient easier after this, but still very weak and exhausted. His condition becoming worse, however, accompanied by high fever, resection of the rib was undertaken on the 7th day after his admittance. Incision over the 9th rib, 10 cm. in length, in the axillary line, and 5 cm. of rib resected. The abscess was then easily opened, giving vent to a large quantity of pus. The cavity, 15 cm. in depth, was washed out with a 5% solution of carbolic acid, two drainage-tubes introduced, and antiseptic dressings applied, the whole being covered by a Martin rubber bandage. Five hours after the operation the patient was without fever and in the best of spirits. Recovery was rapid, the cavity being completely filled up on the 10th day, and two days later the bandage was left off. No reaction in the wound took place, change of dressings showing these each time to be odorless.

Dr. Zancardt, in Alexandria, has also treated a number of cases in a similar manner, and with the same favorable results.

The author thinks the chief danger in carrying out a resection of the rib, lies in the possible injury to the diaphragm, which may be incised according to the position of the abscess, when no adhesions have formed. He advises then resection of two or more ribs and drainage of the cavity of the pleura. As a rule, however, the operation presents no complications as adhesions are generally present, owing to the increased size, etc., of the liver. Abscesses of the left lobe are more rarely met with and usually much smaller than those of the right lobe. They heal often after one puncture. Author advises, in cases where larger and deeper abscesses are present with no adhesions to let the canula remain for some time, under observance of antiseptic precautions, incision of the abscess to be eventually carried out.

In abscesses of the right lobe, on the other hand, incision should be undertaken at once in connection with resection of the rib. We should not wait for adhesions to form, as such a delay is of too great a risk for the patient.—*Deutsch. Med. Wochensh.* No. 26. July 1. 1886.

III. A Case of Penetrating Pistol-Shot Wound of the Abdomen. Resection of the Intestine. Recovery. By Dr. M. FREYER (Darkehmen). The operation in the following case was undertaken under very unfavorable circumstances, little or no assistance being obtainable:

Patient, male, æt. 19, suffering from pistol-shot wound in the abdomen. When first seen by the author six hours after the accident, he was in a greatly collapsed state. On examination a large loop of intestine was found protruding through the wound, this latter being situated above the anterior superior spine of the right ilium. On nearer inspection several small openings in the protruding intestine were discovered, through which fecal matter was oozing. Resection determined on. In order to prevent the feces from entering the abdominal cavity, a roll of twisted cotton-wool wetted in carbolized water was placed around the neck of the loop of intestine, which was drawn further out and excised. Hæmorrhage from mesenteric vessels considerable. The mesentery was first sutured and then the ends of the divided intestine. In suturing the latter serosa was united to serosa, the mucous edges in this way turning inwards of themselves. Twenty stitches were made, fine silk being used, as also for the ligatures. For the restoration of the intestine it was found necessary to enlarge the wound somewhat. This allowed the removal of several small shot found lying in the torn and ragged peritoneum near the wound, and also of a piece of paper wadding. On turning the patient over on the wounded side a large quantity of clear serous fluid escaped from the wound. The lower part of the abdomen was much distended and very sensitive to touch. Wound not closed. Three rubber drainage tubes introduced and antiseptic dressings applied. Patient next seen two days later. Pain was relieved by opium. Only slight amount of fever. Pulse 120. Dressings removed and wound looking well. Abdomen less sensitive. Irrigation with solution of salicylic acid. On the third day stool per anum. General condition very fair. On the sixth day fecal matter was found on the dressings, a fistula having formed. Stools passed regularly per anum, however, excepting on the seventh and eighth days. Edges of wound painful and red. As soon as the ne-

crossed portions of these latter had been cast off, definite closure of the fistula was undertaken seventeen days after it was formed. Three pieces of good-sized catgut passed through the whole depth of the wound and tied on both sides over strips of adhesive plaster. Ten days later two more sutures, this time silk being used, were introduced in the same manner, the right thigh being placed in suspension, in order to relieve tension. It was found necessary, however, to repeat this procedure three times more before closure of the fistula was obtained. Patient recovered completely by the forty-eighth day and returned to his hard work.

On examination the excised portion of the intestine was found to be part of the ileum.—*Deutsch. Med. Wochenschrift.* No. 28. July 15, 1886.

C. J. COLLES (New York).

IV. Colotomia Iliaca. By Dr. A. PODREZ (Harkoff, Russia). In his Surgical Clinic Dr. P. had a patient on whom he performed *colotomia iliaca*, somewhat modifying the method of Madelung.

Mrs. T. K., æt. 45, for four years was suffering from carcinoma colloidis in the rectum, which, starting from a point above the second sphincter had extended above the third sphincter and reached, the adjacent parts of flexura sigmoidea. In January, 1885, Dr. Podrez had performed on his patient *extirpatio recti radicalis*, preserving the the sphincter externus. The patient recovered and for about a year had normal passages; she felt herself well and attended to her home duties. At the end of October, 1885, there appeared again all symptoms of carcinoma, pain, constipation, insomnia, loss of appetite, and cachetic coloring of skin. On January 14, 1886, Dr. P. performed colotomia iliaca, all necessary precautions being observed, including a properly disinfected operating room. A cut was made 8 cm. long, parallel to crista ilei sinistr., 1 inch above Poupart's ligament. The opening in the peritoneum was 5 ctm. long. The edges of peritoneum were attached to those of skin by sixteen deep and fourteen superficial silk sutures. Putting aside the omentum and some loops of the intestines, the descending colon was found and drawn out. It was fixed by silk ligature and then cut through. The lower end was washed in 5

per cent. solution of boracic acid, and its walls were sewed by sixteen sutures according to Czerny, and then it was dropped into the abdominal cavity. Then the mesocolon was dressed and also put into the abdominal cavity. At last the upper end of the colon was fixed in the opening, in which operation there were made forty-eight sutures. A rubber drainage tube was introduced into the intestine and the wound was properly dressed. The operation was bloodless and lasted about three hours. Ice and opium were prescribed to the patient. On January 18 and 20 she had small passages. For some days she was suffering from nausea and vomiting. But on January 19 she was already able to take scraped meat and eggs. On January 22 the patient was allowed to lie on the side, and all the sutures (accessible) were removed. January 26-30, the appetite and sleep were good, and daily passages. February 10—the wound is perfectly cicatrized; the edges of intestine and skin are well united. March 5—a cancerous infiltration was found around the anus; on March 10 a large mass of pus and cancerous fragments were removed *per anum*. March 20 the patient gets up from her bed. Her general condition is rapidly improving. At the time this report was given, April 8, the patient was in a very good condition. Dr. Podrez believes that in case the rectum is affected with cancer, colotomy iliaca is properly indicated.—*Chirurgichesky Vestnik*. May and June. 1886.

P. J. POPOFF (Brooklyn).

EXTREMITIES.

I. Spontaneous Phlebacteriektasia of the Foot. By A. G. GERSTER (New York). Robert Klaile, æt. 14, a well-developed boy, was admitted to the German Hospital, July 2, 1885, on account of a number of rebellious ulcers situated on the dorsum of the left foot. The condition was said to have existed since childhood; no injury was remembered. Physical examination of the internal organs revealed their normal state, with the exception of the heart, which was found to be enlarged, and evidenced a marked increase of the energy of its pulsations. The femoral arteries of both sides were found to beat with unusual strength, and, when somewhat compressed, gave rise

to a strong whirr, both to be felt and heard by the stethoscope. On inspection, an increased size of the left foot became manifest, the hypertrophy pertaining to the soft parts as well as to the bones. The length of the right foot was 24 centimetres, that of the left 25 centimetres. Their circumference was 23 and 24 centimetres. The dorsum as well as the sole of the left foot was occupied by a doughy, soft, nodular swelling of irregular and not well-defined outlines. The skin of the plantar surface was normal, but on the dorsum, along the course of the saphenous nerve, a series of roundish, irregular, rather hard, dark blue, partly confluent nodes could be seen. They were partly covered with a thick layer of rough epidermic scales, partly by a closely adherent dry scab. Attempts at removing this were followed by rather copious capillary hæmorrhage. Their general aspect was that of teleangiectatic nodes. A number of enlarged veins surrounded these nodes, and could be plainly seen through the skin. If pressure was exerted on the swellings, they could be made to disappear, or at least diminish in size, and also a deep-seated pulsation of the whole mass became at once evident. Compression of the femoral artery promptly suppressed the pulsation, and while the compression of the main trunk lasted the swelling did not resume its former size. On the other hand, if the artery was compressed while the tumors were turgid, pulsation ceased, but there was no appreciable decrease of the size of the swelling to be observed. The stethoscope gave evidence of a strong arterial bruit all over the swellings. There was a marked difference in the temperature in favor of the left foot.

It seemed clear that we had to deal with a mixed angioma, containing the elements of both a cirroid aneurism and of teleangiectasia with phlebektasia. As there was no history of a gross lesion of the blood-vessels, a chronic inflammatory alteration of the entire vascular apparatus of the foot had to be assumed, which by this time had also reacted upon the femoral arteries and the heart, inasmuch as they too were found to be hypertrophied.

Ar ablation of the diseased part was proposed, but declined, wherefore having explained the not inconsiderable danger of a deligation of the main artery, and having vainly tried elastic compression for a con-

siderable time, the patient was anaesthetized on July 7, and the superficial femoral artery was tied in Scarpa's triangle. Pulsation ceased for a time, but became faintly but clearly noticeable about ten minutes after closure of the vessel, whereupon the external iliac artery was exposed and tied. Pulsation did not return after this. The wounds were closed, not drained, and the limb was enveloped in a thick swathing of cotton batting.

The course of the healing of the wounds was undisturbed and feverless, but the circulation in the limb became so depressed that serious apprehensions were entertained in regard to its preservation. The toes, especially the first and second, were cold and livid, their sensibility was destroyed, and in the course of the first week necrosis of the integument of the terminal phalanges became manifest. At the same time the skin on the outer and posterior aspect of the limb, exactly over the course of the peroneal muscles, sloughed, and on being removed, necrosis of the entire belly of the peroneus longus was ascertained. A fortnight after the operation, the muscle was removed. It had the aspect of a pale, waxy, translucent substance. There was hardly any suppuration, and it was deemed advisable not to leave the sequestration of such a large mass of tissue to the rather uncertain and risky efforts of nature. The toes were also removed. The patient was discharged cured in October, and no pulsation or increase of the tumors were noted at the time. The size of the swellings was somewhat smaller than before the deligation, but there was no hardening or marked shrinking such as would follow obliteration; on the contrary, the dough-like consistency had remained unaltered.

Patient was readmitted to the hospital in January, 1886. Pulsation had returned, and was just as evident as before the operation. The teleangiectatic spots were all supplanted by ill-conditioned ulcers. The metatarso-phalangeal joint of the great toe was open and suppurating, and the boy complained of much pain and discomfort due to the ulcers.

Pirogoff's amputation was done January 29 1886, with the aid of Es march's band; the sections of an unusual number of large vessels, twenty-seven, were taken up and tied before; eleven more ligatures

were applied after the removal of the constriction. The segment of the calcaneum was nailed to the tibia, and the wound closed by an interrupted catgut suture. Drainage was effected through a counter-opening made alongside of the tendo Achillis. The first dressing was removed twenty-one days after the operation, and the wound was firmly united, except along a small portion of the suture, where the rather fine catgut had been absorbed too soon. This narrow strip of granulation, together with the track of the nail, was found cicatrized over five days later, when the second dressing was changed.

The patient has a good stump, and walks on it without support.

A very excellent anatomical study of a case of considerable magnitude, by W. Krause, will be found in the second volume of Langenbeck's *Archiv*, published in 1862. Nicoladoni has also reported three cases, two in vol. 18, pp. 252 and 711; the third one in vol. 20, p. 146, of the same periodical. All, with the exception of one reported by Nicoladoni, were affections of the upper extremity, which is said to be the favorite site of the disorder. Both cases seen by me involved the foot, one the left, the other the right. I may add, that the other case presented, especially as regards the local appearance and situation of the malady, an almost identical state of affairs as the case before you, only of less development.

As regards the treatment, the case presented bears out the experience of others, inasmuch as it demonstrates the futility, in the more extensive cases, of less radical measures than ablation.—*Proceedings New York Surgical Society*. March 8, 1886.

GENITO-URINARY ORGANS.

I. Supra-Pubic Lithotomy. By N. A. SOKOLOFF, M.D., (St. Petersburg). Stone in the bladder is a rare disease in the capital of Russia. Dr. S. had only four cases of that disease during two years in the Mary's Hospital. On his patients he performed supra-pubic lithotomy. Bladder was distended with 4% solution of borax.

Case I. Male, æt. 25, was suffering from calculus for twelve years. November 29, 1883, operation. December 15, urine is discharged through the urethra, and only a few drops through the wound. January

10 to 29, 1884, slight symptoms of pyelitis. February 21, wound is closed, and the patient was discharged as cured.

Case II. Male, æt. 18, was suffering from calculus since childhood. March 5, operation. April 18 was discharged as cured; the wound was perfectly cicatrized.

Case III. Male, æt. 9. July 20, 1885, operation; stone was of size of pigeon's egg. July 22, urine passes through the wound which was sutured; sutures removed and drainage tube introduced. Fever. August 14, urinates normally. September 21 to October 2, fistula now is closed and now open again; closed permanently November 7. In January, 1886, wound was cicatrized, and the patient left the hospital.

Case IV. Male, æt. 22, was suffering from calculus since childhood. On examination in the bladder were found two large stones and several small ones. June 25, 1885, operation; one stone $1\frac{1}{2}$ cm. removed, the other broken. The wall of the bladder attached to that of the wound. July 7, a stone is removed through the openings; cystitis. Fistula continued up to September 2. September 16, wound is cicatrized and the patient was discharged as cured.—*Chirurgichesky Vestnik*. May and June, 1886.

P. J. POROFF (Brooklyn).

II. Lesions Caused by the Presence of the Eggs and Embryos of "*Bilharzia Hæmatobia*" in the Bladder, the Prostate, the Rectum, the Mesenteric Glands, the Kidney and the Liver. Dr. Albert Ruault presented to the Anatomical Society in March, 1885, microscopical preparations of the above organs, taken from two subjects who had succumbed to the complications of calculous cystitis. In the sections of the bladder a great number of the eggs of the distoma can be seen in the substance of the bladder wall which is considerably thickened. The eggs are particularly abundant in the mucous coat and immediately below it. The thickening of the organs seems to be due to an abundant formation of connective tissue. There is also some alteration of the muscular fibres, but it is not clear whether the degeneration is vitreous or amyloid. In the prostate also there is a certain quantity of the distoma eggs, and there

is much connective tissue of new formation. The section of the rectum shows a large number of the eggs in the mucous membrane. The alteration appears to be but little advanced, and there are no dysentery-like ulcerations to be seen. The section of the kidney exhibits some of the eggs and also free embryos. Around the eggs connective tissue of new formation is seen producing an interstitial nephritis of vascular origin. In the liver the ova are situated in the neighborhood of the portal spaces, or in those parts of the hepatic lobules nearest to the spaces. As M. Kartulis says, the retraction of the liver caused by the deposit of the distomum eggs seems to be due to a cirrhosis. The cirrhosis is evident in the preparation.—*Progrès Médicale*. July, 1885.

P. S. ABRAHAM (London).

ABSCESSSES, TUMORS.

I. On Draining Pelvic Abscesses by Trephining the Ilium. By Dr. RINNE (Greifswald). This is a report of two cases of very tedious pelvic abscess rapidly cured by G. Fischer's method of drainage through the ileum. The first case was that of a man æt. 26, who in childhood suffered from coxitis ending in ankylosis. In the earlier years of the coxitis he developed a pelvic abscess (by perforation of the socket); this for fourteen years had kept up a fistula on the front of the thigh. Operated three and a half years ago; cure in three months. The second case was that of an otherwise healthy girl who for eight years had suffered from suppuration of the flange of the left ilium, probably in consequence of non-tubercular osteitis. After lying two years it broke spontaneously a hand's breadth below the spina anterior sup. Repeated drainage of the abscess cavity through the long narrow resistant sinus secured temporary closure, but never cured the abscess. Operated in 1885; cure in nine weeks. Large subperiosteal abscess in the internal iliac fossa, filled with granulations and scant pus.

R. makes an antero-posterior incision through the musculature three finger breadths above the large trochanter, and chisels through the os ilii so that a finger can be readily introduced. The procedure is not dangerous; it is valuable where a cure is not effected through the

usual perforative opening.—Report of XV Congress of Germ. Surgs. in *Centbl. f. Chirg.* 1886. Nq. 24.

WM. BROWNING (Brooklyn.)

II. The Role of Parasites in the Development of Certain Tumors. Fibroadenoma of the Rectum Produced by the Eggs of Distomum Hæmatobium. By Dr. V. BELLELI (Alexandria, Egypt). The hypothesis that many tumors have a parasitic origin every day acquires greater probability. Already it is beyond doubt that all granulation growths (tubercle, glanders, farcy, lupus) are the consequence of the development of a special parasite. The question is still open as regards the bulky "tumours" which are really worthy of the name. The discovery, however, of actinomyces in certain sarcomas opens a large field of study, and justifies researches directed with this view. Hence the interest in the development of certain tumors, typical in form and histological structure, under the action of a parasite very common in Egypt, the "*distomum hæmatobium*" or "*Bilharzia hæmatobia*."

It is known that the adult animal which lives in the portal vein and vesical veins, deposits its eggs chiefly in the little veins in the neighborhood of the intestines and of the bladder. The dimensions of the eggs, 160 μ long and 60 μ broad, hinder them from reaching the capillaries. They are stopped in the small veins which are subsequently lacerated by the efforts of the "*vis a tergo*." Some of the eggs are thus set free in the intestinal and vesical cavities, but others remain implanted in the tissues. In the whole length of the intestinal region the infiltration of the *Bilharzia* eggs may produce different effects; that which predominates, however, is the formation of certain tumors which have the appearance of polypi. It is in the rectum that the development of these tumors is particularly frequent, or rather it is in this region that they generally grow to a greater size. By their situation, at a distance greater or less from the anus, they give rise to various phenomena, of which the principal are, hæmorrhage, diarrhœa, tenesmus—in a word all the symptoms of dysentery. These tumors are often as big as a walnut or almond, but many Egyptian doctors have cited examples of rectal tumours consecutive to the *Bilharzia*, which have reached the size of an egg, or even of a small fist.

The following case occurred in the hospital of the Deaconesses of Alexandria, under the care of Dr. Mackie :

A child, *æt.* 12, for nearly two years suffered from hæmaturia and dysenteric symptoms. It was observed that a tumor appeared at the anus during efforts of defecation. Recently the hæmaturia had disappeared and the rectal tenesmus had considerably diminished, but defecation was more and more impeded by the increased growth of the tumor. The child was anæmic; the urine clear and transparent, but a repeated examination showed that it contained a notable quantity of *Bilharzia ova*. Rectal examination revealed, at a distance of 5 to 6 centimetres, from the anus, a large tumor implanted by a broad base on the left side of the rectum. During the efforts of defecation a part of the tumor became visible through the orifice of the anus. This tumor was removed at the level of its base by aid of the *écraseur*.

Examination of the tumour.—The tumour of the approximate size of a small apple is flesh coloured and of soft consistence; the surface regularly lobulated, with fibrous tracts limiting the principal lobules. Each lobule is formed of a finely granular substance. On a cross section the aspect is identical with that of the surface, except that there are exposed a few cystic cavities filled with a gelatinous, yellow, transparent substance. In one of the cysts is remarked a blackish material of hard consistence—evidently *foecal*. The gelatinous substance was cursorily examined under a low power for the distoma eggs; but as the result was negative the tumour was cut up in small pieces to be hardened in alcohol. On one of the fresh fragments of the tumour a considerable number of the ova could be distinguished with the microscope, containing living embryos, and one of them presented the various movements often observed some minutes before the rupture of the egg.

Histological examination.—In the sections treated with picrocarmine, large tracts, strongly colored, can be observed with the naked eye, limiting alveolar spaces more or less circular, formed of a transparent tissue of reticulate structure and feebly colored with the picrocarmine. Under the microscope the opaque bands are seen to be composed of connective tissue more or less compact; the alveolar

spaces being masses of tubular glands. Between each gland are thinner divisions of connective tissue. The inter-alveolar connective tissue is fibro-cellular, more or less compact; in certain spots the fibres are so close together that the cellular elements are scarcely visible. In other parts they predominate. Moreover, there are limited places where the tissue, composed almost entirely of cells, assumes the aspect of embryonic tissue. Most of the cells are rounded, but many are elongate and fusiform. Their protoplasm is uniform in appearance and more or less stained by the picrocarmine. In the sections treated with acetic acid the presence of a nucleus is manifested in some of the cells; others show only some granules strongly stained, probably the debris of a nucleus. In this same inter-alveolar tissue a considerable number of eggs and free embryos of the distoma are distinguished. They are found for the most part outside the vessels and are equally scattered in the fibrous and in the embryonic tissue. They are most often disposed in considerable groups—containing as many as twenty. Nearly all the eggs have the spine terminal, a few have it on the side. Some of them have the contents granular, others have the yolk more or less segmented, and others enclose the embryo already formed. Many of them, especially those in the compact tissue, have the contents obscure and blackish. The intra-alveolar connective tissue presents nearly the same characters as the above, but the fibrillar connective tissue with abundant proliferation of cells predominates. In this tissue the Bilharzia eggs are far from being as numerous as in the inter-alveolar, but a great number are to be seen, most often isolated, or rarely in groups of four or five.

In the sections, the glands which make up the alveoli are cut in various directions. Some are simple tubes, others difurcate or have several branches. Their length varies from $\frac{1}{2}$ to 1 millimeter; their diameter from 50 to 250 μ . Some have a distinct membrane. They are lined by cylindrical epithelium, the cells having no nuclei, but transparent and almost hyaline contents, and they vary in size. Some of the glands contain nothing, others an amorphous granular substance, and others are filled with hyaline spheres of cylindrical or polyhedral transparent cells.

Independently of the glands large empty spaces are to be seen, which evidently form part of the cysts which are recognized with the naked eye. They have not all the same origin. In a few a great number of the glands open, indicating that they result from accumulation of the glandular secretion; others have no communication with the glands and they enclose several fibrous tracts; they are probably formed by the destruction of a certain number of glands. Indeed, in some places can be distinguished masses of glands with a part of the walls and of the cells, destroyed so as to form a single cavity.

Diagnosis.—The above histological characters allow the tumour to be called a fibro-adenoma. The great augmentation in the number of the glands, and their deviation in type, show the growth to be a true adenoma, and not a simple hypertrophy of normal glandular tissue, and the large development of fibrous, compact connective tissue justifies the name of fibroma in addition.

Observations.—The cause which has determined the development is not doubtful, viz., the eggs of the Bilharzia, deposited in the mucous membrane of the rectum, having provoked an irritative process which has ended in the formation of an adenoma. These eggs have not acted solely as foreign bodies; most of them are placed living in the walls of the rectum, and many even have the embryo already formed. The movements of the embryo, and its exit from the egg, are also causes of the tissue irritation.

The Bilharzia eggs not only explain the genesis of the tumour, but they are the cause of its successive development and its continued growth. In fact the large vessels which end in the tumor are continually carrying the living eggs throughout its extent, and the numerous foci of irritation provoke a continual development of the elements of the growth. Where a part of the tumour is newly formed its vascular system has a parallel development which allows of the introduction of eggs into new tissue. This is, therefore, a case in which, in place of the hackneyed irritations usually invoked to explain the origin and growth of tumours, it is possible to substitute the more definite and less hypothetical action of a special parasite. It is possible to go further, and to find in the peculiarities of the life of the parasite, an explana-

tion of the nature of the tumour. It is generally admitted that for an adenoma to form the development of its histological elements should be so moderated that they have time to be disposed regularly and to reproduce the typical structure. The Bilharzia eggs produce a moderate irritation. The parasite is not fully developed in the human body—the ultimate transformations do not take place in the tissues. The embryo is only endowed with certain movements which soon cease, the irritation of the tissue being circumscribed and consequently moderate. If, on the contrary, the ova underwent a series of transformations ending in the perfect animal, it is probable that the more extended irritation of the tissues would hinder the regular disposition of the neoplastic histological elements. The abundant formation of epithelial cells would not give rise to new glands, but to irregular masses of cells imbedded in the connective tissue, we should then have all the elements of an epithelioma or true cancer. This is, of course, a pure hypothesis, but a likely one, which in similar cases to the above could be easily verified. Indeed, instead of a parasite like the Bilharzia there may be others which, from their size, escape a superficial examination. The particulars of the life of these micro-organisms may also, as in the case of the distomum, give the key to the origin, growth and nature of ordinary tumours, malignant and benign. Modern science tends to these ideas, and it is probable that they will be sooner or later verified.—*Progres Med.* July, 1885.

P. S. ABRAHAM (London).

III. Notes Toward the Formation of Clinical Groups of Tumors. By J. HUTCHINSON, F. R. S., (London). Advances the hypothesis that the time has arrived when it is both possible and desirable to make for practical purposes a more detailed classification of tumors than has yet been attempted, and that this must depend more upon locality, cause, contour and general course of the growth than upon mere microscopical appearances. The plan proposed is to take any example of rare disease and keep it by itself until others similar to it are found, and thus construct groups, which in turn may become large enough to allow of determining without much risk of error what are the differential peculiarities of the malady. As a general law for guid-

ance in clinical observations in this regard, repetitions of structural peculiarities may be expected whenever the morbid tendency displays its activity in precisely similar regions. Of this law the author submits several examples, such as rodent ulcer, which occurs with such preponderance in one special region that it gained the name of "peculiar ulcer of the eyelids." While the writer presents numerous instances in favor of his proposed method of classification, such as a characteristic fungous tumour of lympho-sarcomatous composition, occurring in the upper part of the neck, melanotic sarcoma of the sole of the foot, symmetrically fatty outgrowths, a hard and bossy tumor of the palate, which, though presenting a deep ulcer, is devoid of irritability and pain, warty tumors in cicatrices, etc., he notes more at length three groups :

1. *Melanotic Whitlows*.—This is one of the several peculiar forms which melanotic sarcoma presents under the law of modification by locality; the amount of pigment is very slight in the vicinity of the nails, and it is often difficult to recognize the pigmented structure in this region, but along the unswollen border of the tumor is to be seen a faint, melanotic line; the disease spreads more slowly here than does melanosis in most other positions and destroys the nail. The fungating growth which it finally produces, fails altogether to obtain pigment and is quite colorless. There is much greater hope of delaying the progress of the disease by operation than in most other forms of melanosis.

2. *The Crateriform Ulcer*, a new form of epithelial cancer of the face.—This is a malignant growth of epithelial type, met with, as far as the author's experience goes, only on the upper part of the face and more especially in the precise localities of the common rodent ulcer. The first stage is a bossy, rounded lump which rapidly attains considerable size and presents a somewhat conical summit. At this summit ulceration occurs, and a deep cavity forms with exceedingly little supuration or obviously destructive inflammation, forming a crater, the walls of which are of much thickness and of great firmness; the growth is much less vascular and less succulent than that of rodent, and, while it is easy to scrape the latter away, it is quite impossible to do so with

this. It usually begins in those past middle age, and without any obvious cause; is rapid in its progress, growing as large in a few months as rodent would in many years. As far as the author has observed, it shows no tendency to fungate or become warty, and in this respect, as well as in hardness of structure, density and thickness, differs from what is observed in common epithelial cancer of other parts.

3. *Recurring Fibroid of the Skin* (spindle-celled sarcoma).—Examples of the recurrent cutaneous fibroid are very rare, but they are very peculiar in the mode of development, the inveteracy and rapidity with which they recur on extirpation and in the absence throughout of any tendency to gland disease. In each of the cases observed, the early stage of the new growth was insidious and for some time very slow, but if left alone, there was ultimately a tendency to fungate and to the formation of blood cysts. The deep fascia became involved if the growth were neglected, but in the first instance the skin alone was implicated; in two out of three cases the growth was on the thigh, and in the third on the lower part of the abdomen. The author has never seen a recurring fibroid of the skin on the upper extremities, the head, nor, with one doubtful exception, on the upper part of the trunk. The tumors seemed to be softer in structure and grew more rapidly with each recurrence; their elements were repeatedly and by different microscopists assigned to the spindle-celled sarcomata.

If recurring fibroids of the skin are grouped by themselves, similar groups should be formed of the tumors of similar structure but more fibrous and developing in deeper parts, which are much harder and often found attached to the periosteum or to the deep fascia, and of the hard fibrous tumors, developed deeply, of very slow growth and tending to unsymmetrical multiplicity (ANNALS OF SURGERY, vol. i, p. 423). By these and by numerous other instances referred to less at length, the author shows that by careful case-collecting and the selection and grouping of cases clinically alike, clinical families, much more minutely subdivided than is possible to the microscopist as yet, may be constructed on a natural basis.—*Internat. Jour. Med. Sci.* 1886. Jan., April, July.

IV. Cancer of the Cartilage or Chondrosarcoma. By DESIR DE FORTUNET, M.D., (Lyon). This study of cartilaginous tumors is based upon a case of tumor originating in the tibio-fibular articular cartilage and in fourteen months attaining the size of the fist, the growth being attended with so great pain that amputation in the lower third of thigh was performed for its relief. The amputation was done according to the method of Molliere, complete hæmostasis being obtained by torsion of the vessels without the application of a single ligature. This case is submitted in opposition to the theory that chondromata arise only from abnormally placed cartilage, and to prove that normal cartilage tissue may give rise to tumors of a nature identical with itself. Further, it shows the possibility of malignant tumors of the cartilage, and the author proposes the name of chondrosarcoma for it in opposition to chondroma, used to designate benign growths.—*Revue de Chirurgie*. 1886. May.

V. On Fatty and Sarcomatous Tumors of the Knee-Joint. By R. F. WEIR, M.D., (New York). Details three unpublished cases together with a review of the literature of the subject. The first was of a young man in whose knee-joint, on the inner side of the patella, was felt a mass of considerable firmness like a loose cartilage and the size of an almond; it could be moved freely within the joint, but was evidently pedunculated as it could not be forced without it. Under antiseptic incision the supposed cartilage proved to be a portion of fatty tissue, harder than usual and attached by a rather broad thick pedicle, which stretched under the ligamentum patellæ and across the joint. As the mass could be pulled out with moderate traction, an attempt was made, in addition to the removal of the button-shaped end, to cut off as much of the lipomatous growth as possible after ligaturing it. This required an unusual amount of manipulation, and in spite of antiseptic precautions and immobilization, a suppurative synovitis set in, which necessitated amputation. The second case was of a young woman who had suffered for a year from pain, swelling and stiffness of the knee, in which was detected, internal to the patella, a lump the size of a large bean and movable for about an inch parallel to the axis of the limb; the joint was opened and, under carbolic

spray, the tumor exposed and lifted out, and its slender pedicle ligatured and divided, proving to be a giant-celled sarcoma; the patient made a good recovery. The third case was similar to the others in history, and under antiseptic incision an irregular shaped, softish growth, yellowish pink in color and marked by sundry ecchymotic patches, the result of recent exertion in dancing, was exposed, the growth being $1\frac{1}{2}$ inches long by 1 broad and nearly $\frac{3}{4}$ of an inch thick, and proving to be a fibro-sarcoma. This mass was held by a long, slender pedicle which was tied and subsequently divided. In spite of slipping of the ligature and consequent intra-articular hæmorrhage, which was checked by pressure, by which the blood in the joint was also evacuated, the patient passed on to a satisfactory recovery. A search into the literature of the subject gives but a single case of similar sarcomatous growth and but eight of lipomata.

The practical deduction to be drawn from the review of so few cases of a somewhat obscure affection is that too much effort should not be made, in the fatty growths, to effect their total extirpation, since the removal of the floating portion is all that is called for; and that, in cases where the suspicion of sarcoma is microscopically verified, the subsequent progress of the two cases reported leads to the belief that the same conclusion will be arrived at.—*N. Y. Med. Rec.* 1886. June 26.

JAMES E. PILCHER (U. S. Army).

VI. Melanotic Whitlow. By JONATHAN HUTCHINSON. Under this name the author alludes to cases of sarcoma, usual by melanotic, which spring from the bed of the nail. The black color is sometimes limited to a narrow border near the nail. He points out that when melanotic sarcoma fungates, and when it affects the glands, the larger growths are often white.—*Brit. Med. Jour.* 1886. P. 491.

VII. Traitement des Fibromes de la Paroi Abdominale. By TERILLON. The author cites two cases respectively of fibroma and fibrous sarcoma of the abdominal wall in the inguinal region, both in women. He lays stress on the fact that these tumors are often adherent to the peritoneum, and in removal of a portion of that mem-

brane may be necessary.¹ In one of the cases cited the adhesion of the tumour to the serous membrane was firm, but its division was avoided by removing the bulk of the tumour and then dissecting off the adherent portions. If any part of the tumour be left, recurrence is frequent, although the growth has the characters of a fibroma.—*Bull. Gen. de Therap.*

F. S. EVE (London).

VIII. The Immediate Closure and Rapid Cure of Fistula in Ano. By STEPHEN SMITH, M.D., (New York). Referring to the fact that this method of operation seems to have occurred to a number of surgeons independently and acknowledging his indebtedness to Emmet's operation for lacerated perineum, the writer describes his method as follows:

The bowel being cleaned out, the patient anæsthetized, the parts irrigated antiseptically, and a sponge, wrung out in a bichloride solution, introduced into the rectum above the fistula, the fistula and abscess cavity, if there be one, are opened freely, the pyogenic membrane thoroughly enucleated with the scalpel or scissors and all hæmorrhage arrested. The chief object of the operation is to secure perfect apposition of these freshened surfaces; to bring the whole wound into view, an assistant should introduce an index finger well into the rectum and, bending it as a hook, extrude the bowel. The first sutures should be so applied as to bring the deep surfaces together and evert the margins of the mucous membrane. To accomplish this, a carbolyzed silk ligature with a needle slightly curved at the point is used. One of the needles is now passed just above the highest point of the incision and from a fourth to half an inch from the margins of the wound, and the thread is passed through the center; the needles are then passed in opposite directions, at intervals of half an inch, in a continuous saddler's stitch so as to draw the two faces of the wound together and slightly evert the edges of the mucous membrane, but without any strain. The entire fistula track being now drawn outside by gentle traction on the ends of this suture, the edges of the wound are nicely adjusted by a continuous suture, commencing at the upper extremity of the wound. The operation is completed by passing two

or three large carbolized silk ligatures entirely under the fistula and tying them over an iodoform gauze pad, rolled firmly and laid along the wound, the object being to draw the deep portion of the fistula into suitable apposition. The parts are then dressed antiseptically and precautions taken to prevent movement of the bowels. In case of a large or irregular abscess cavity he suggests two modes of procedure, (1) by employing the saddlers' stitch, taken still farther from the margins of the wound, in order to bring the deep parts together; (2) by interrupted sutures passed as in lacerated perineum completely around the cavity—a method more difficult to employ but surer than the other. The cure is complete in a period varying from eight to fourteen days. The principles to be borne in mind in the operation are (1) complete removal of the lining membrane of the fistula and of the abscess cavity which may exist; (2) accurate and permanent adjustment of the opposing surfaces, and (3) thorough antiseptic treatment of the wound.—*N. Y. Med. Jour.* 1886. June 12.

JAMES E. PILCHER (U. S. Army).

BONES, JOINTS, ORTHOPÆDIC.

I. Congenital Symmetrical Exostoses. By Dr. REULOS. Observations of multiple symmetrical exostoses are far from being rare. If authors are in accord as to the mode of their development, they are not so with regard to their etiology. Amongst the cases published some have been attributed to rickets, some to a special and chronic inflammatory process, others to a super-abundance of the germative material which should later contribute to the formation of osseous tissue, or to some trouble of nutrition of unknown cause. All these hypotheses are supported by a certain number of facts. In many of the observations "heredity" plays a somewhat important part, but until now no such good example has been met with as in the following case:

Mrs. X., died at 79 years, of good general health, had always had symmetrical exostoses in the neighborhood of the femoro-tibial articulations.

M. R., her brother, died at 83 years; had from birth exostoses on the lower limbs. He had four sons, who all bore femoro-tibial exosto-

ses. In one of them they were so developed that he walked with difficulty.

Mme. L., only daughter of Mme. X., now æt. 62, healthy, possesses since her birth two bulky exostoses on the inner tuberosities of the tibiæ. She has had eight children, of which four are living. They all have exostoses situated on the lower limbs at different heights and nearly all symmetrical.

The eldest of the sons, æt. 37, invalided on account of the multiple and large exostoses of the legs, has two daughters who present exostoses of the bones near the femoro-tibial articulation. The second son, æt. 34, has like his brother been excused from military service on account of his exostoses. He is healthy, walked at 13 months; shows no incurvation of the long bones; teeth regular and without erosions; his muscular system very well developed, and articulations normal. No trace of rheumatic, syphilitic or other diathesis. His lower limbs are alone the seat of the abnormalities.

L. F., son of the preecedent, æt. 7, of good general health, brought up at the breast, walked at 11 months, teeth well placed and without erosions, no incurvation of the long bones or trace of rickets, never had rheumatism or epiphysary pains; exhibits exostoses on the femora, tibiæ and fibulæ, and also on the chondro-sternal articulations of the fifth and ninth ribs, and on the scapulæ.

The third son of Mme. L., æt. 24, has exostoses like his brothers.

The fourth child of Mme. L. is a daughter who married young and has had eleven children, of which the five living, carry, like her, congenital symmetrical exostoses in the neighborhood of the knee-joint.

The history of the family seems worthy of interest, because it establishes incontestibly the transmission of the exostoses by virtue of heredity, because it puts in relief the character of the congenital exostoses, and because it gives us a means of distinguishing this from the specific exostoses. This character is the symmetry which has not failed once in any of the members of the generation.—*Progrès. Méd.* August. 1885.

P. S. ABRAHAM (London).

II. Excision of the Knee-Joint. By A. M. PHELPS, M.D., (Chateaugay, N. Y.). Cases for this operation should be carefully selected; it should never be resorted to in children under 8 years of age, except in cases of destruction of the entire joint and not until other means have failed. It is better at this age to excise through exploratory openings, such portions of bone and tissue as are found diseased, using the gouge-scoop and chisel thoroughly, establishing perfect drainage, fixation and extension. Chronic diseases with deformity, either purulent or non-purulent, not yielding to ordinary methods of treatment, are suitable cases at any age. Extensive suppuration, burrowing of pus, with many sinuses distributed about the joint and extensive necrosis, making it difficult, uncertain or impossible to remove all diseased tissue, are cases suitable for amputation. Deformities from long standing arthritis, with but little bone disease, limited to the articulations are very favorable cases for excision. Ankylosis in bad position, compound luxation and subluxation from long standing joint disease should be excised. Many cases of joint disease among the poor, which might by long treatment be cured, if the patients could spare time from their work, should be excised, because they are then soon restored to health; while, if the operation were not performed, amputation would quite likely be demanded in after years, owing to frequent relapses. The end sought in all operations of excision of the knee-joint should be (1) to remove all the diseased tissue, including the capsule of the joint; (2) to make the incisions in such a manner as to furnish easy access to every part of the joint and supply perfect drainage; (3) to restore old tissues to their normal position without leaving cavities; (4) to get perfect drainage; (5) to insure absolute immobility of parts after the operation; and (6) in children, after resection of the flexor tendons, placing the limb straight and utilizing the patella, when practicable, to prevent relapses. The operations which best meet these indications are Volkmann's, Fenwick's and Neuber's.

While tenotomy of the hamstring tendons has been frequently performed to allow straightening of the limb before the operation, to obviate the sacrifice of a greater amount of bone, the author believes resection of all the flexor tendons, to prevent their subsequent action in

producing relapse in children, to have originated with himself, and considers that it adds greatly to the efficacy of the operation, while detracting nothing from its safety. The paper is accompanied by reports of nine cases, in four of which the flexor tendons were resected, and tables of 329 operations antiseptically performed.—*N. Y. Med. Rec.* 1886. July 21.

I. E. PILCHER (U. S. Army).

GYNÆCOLOGICAL.

I. **Alexander's Operation.** Dr. Doléris contributes a lengthy article on this subject to the *Nouvelles Archives d'Obstétrique et de Gynécologie* (Jan. to May inclusive). After reviewing at length the history of the operation, which he clearly shows was first suggested by Alquié in 1840, he cites Alexander's cases in full, and adds to these 100 others which he has collected in literature. To these should be added nine more operations by Dr. Polk of this city, three by Dr. J. B. Hunter (not reported) and two by Dr. F. B. Harrington, of Boston. Several others have been performed in this city, so that the number of actual operations is probably 175 at the lowest estimate. In spite of the evidence thus adduced, there is a singular feeling of uncertainty among gynecologists with regard to the ultimate value of the operation. Its technique requires no further exposition. As regards the *permanence* of the results we are still left very much in the dark.

II. **Oophoraphy.** Under this name Dr. Imlach described before the British Gynecological Society a novel operation for the permanent reposition of prolapsed ovaries, when their extirpation by laparotomy is undesirable. In multiparæ, according to this gentleman, the ovaries are kept in place by the infundibulo-pelvic ligaments; whenever the latter become much relaxed, the ovary sinks downwards and becomes congested by reason of the interruption of the circulation in the vessels supplying the organ. Dr. Imlach seeks to restore the prolapsed ovary to its normal position in the pelvis and to maintain it there by shortening the relaxed infundibulo-pelvic ligament and suturing it to the hilum. Fourteen successful cases were reported. In the discussion

which followed the paper Mr. Lawson Tait insisted that prolapsed ovaries were usually the scat of chronic inflammation, and therefore that the operation suggested by Dr. Imlach might relieve, but would never cure, the patient.

**III. A New Operation for Repair of Complete Lacera-
tion of the Perineum.** Dr. R. A. Jamieson reported to the same society the successful results obtained by the following method of operating, in cases of laceration of the perineum through the sphincter:

Separate the recto-vaginal septum into two layers for a distance of about half an inch [from the anus?], then divide the vaginal portion longitudinally in the median line dissecting up the mucous membrane, with a portion of the adjacent skin, forwards on either side to the level of the insertion of the *labia minora*. This is now separated in the form of a strip, but is simply lifted from its previous attachment to the depth of $1\frac{1}{2}$ inches, parallel to the long axis of the body, its free border being the median longitudinal incision and a curved line drawn about half an inch "below the junction of the partly altered vaginal mucous membrane with the skin of the thigh." Transfix the horizontal border of each flap with a piece of catgut, to the end of which is attached a piece of lead. A cutaneous flap 4 inches long, having the shape of an isosceles triangle, with its base corresponding to the line of junction of the skin and mucous membrane, is now made on each side. These, with the muco-cutaneous flaps, are dissected "upwards and outwards to a line parallel with their bases, but a quarter of an inch external to them, and a quarter of an inch deeper." The raw surfaces of the muco-cutaneous flaps are stitched together with fine catgut along the median line, to form the lower part of the new posterior vaginal wall. The new perineum is made by carrying a continuous catgut suture from side to side along the lines of denudation "a quarter of an inch internal to the inclination of the cutaneous flaps to the subjacent areolar tissue." The anterior edge of the rectal wall is next drawn down and fastened behind the new perineum, and the cutaneous flaps are "loosely replaced, leaving on each side $1\frac{1}{2}$ inches between their

apices and the apices of their former beds." In order to complete this complicated operation, its author directs that two sutures be carried on each side "deeply into the perineo-crural angle, so as to ensure the formation of a fold in this situation" while a line of sutures is carried along the edges of the flaps, and the borders of the gap which remains are drawn together.

In the course of the discussion which followed this rather blind description Dr. Fancourt Barnes referred to the operation performed by Mr. Tait, the essential feature of which was the splitting of the recto-vaginal septum. The advantages of Tait's method were rapidity, absence of subsequent pain, the fact that the new perineum was more solid, and that the bowels could be moved soon after the operation. The operation was equally applicable to any variety of perineal laceration.

Dr. Imlach described a method by which a flap was taken from each labium, that on the left side being turned outward, while the right hand flap had its base in the median line of the posterior vaginal wall. A strip from the recto-vaginal septum was then to be dissected outwards. The free edge of the right flap was drawn across to the left labium and attached to its raw surface by fine sutures; the left flap was united in a similar manner to the right labium. "Then," in the words of the speaker, "pass a single stitch through the anterior edges to prevent infiltration of vaginal secretions, and then through the recto-vaginal strip behind." Dr. Imlach claimed that a solid perineal body was formed in this way, and not a mere median cicatrix, as after most operations.

IV. Excision of the Diseased Portion of a Cancerous Uterus Preliminary to Total Extirpation. PEAN claims priority in the following modification of the ordinary operation of vaginal hysterectomy. The operator, being provided with two thermo-cautery knives at a white heat, proceeds to remove small fragments of the diseased tissue until nothing is left but the shell composing the healthy uterine wall. There is no serious hæmorrhage during this procedure.

The *cul-de-sac* is now opened and the uterus removed in the usual manner, except that the vessels in the broad ligaments are at once seized *en masse* with long hæmostatic forceps, ligatures being applied at leisure.—*Gaz. des Hôp.* 1886. Jan. 21.

V. Conservative Ovariectomy. Professor SCHROEDER has recently devised an ingenious operation, which consists of excising the diseased portion of an ovary and leaving the healthy tissue, with a view to the preservation of the function of the organ. After carefully dissecting out the larger cysts, Prof. Schroeder unites the raw surfaces with fine sutures and then restores the ovary to the abdominal cavity. According to the experience of this celebrated surgeon, and of those who have practiced this operation, the results have been most gratifying. While menstruation continued, the former dysmenorrhœa was relieved in several instances. In one case the patient became pregnant after excision of portions of both ovaries.

VI. The Use of Cocaine in Gynecology. Dr. GEORGE W. JOHNSTON (Washington). After discussing the value of the drug as a local anæsthetic in cases of vaginismus the writer dwells upon its use in operative work, acknowledging that its range is restricted. Cocaine does not produce that profound and permanent anæsthesia which it is necessary to maintain during operations upon such sensitive parts as those in the female genital tract. The operator must repeatedly resort to fresh injections of the drug, while practically it is found to be difficult to keep the patient in a constrained posture, even when she is free from actual pain.

The author recommends the stronger solution (20%) used in Germany. The part to be anæsthetized should be thoroughly washed with an antiseptic solution, and then carefully dried before the applications of cocaine are made. After thoroughly peniciling the part with the solution above mentioned a piece of absorbent cotton soaked in the fluid should be allowed to remain in contact with it. The anæsthetic effect is obtained in from four to six minutes. Deep injections may be

practiced in certain localities; by beginning the denudation at the most dependent point in plastic operations on the vagina, each area may be coenized as it is reached. The author summarizes with the opinion that "by surface-pencilling with strong solutions in nearly all the simpler and more frequent plastic operations about the vagina and cervix a sufficiently deep and prolonged anæsthesia may be produced."

Following the body of the paper are a number of reported cases, several of which occurred in the author's practice, in which coloprraphy, trachelorrhaphy, operations on the urethra, etc., were successfully performed without pain to the patient. The paper deserves no little commendation, as it presents in a concise form a collection of valuable surgical memoranda which were widely scattered throughout the literature.—*Medical Record*. 1886. July 17.

VII. The Treatment of Retroflexion of the Uterus by a Recent Operative Method. VON ROBENAU. The author suggests the following novel operation for the relief of cases of retroflexion in which either a pessary cannot be retained, or, if worn, fails to keep the uterus in proper position. The anterior lip of the cervix is completely excised to the height of 4 centimetres. "The immediate result," in the words of a commentator in the *Centralblatt für Gynäkologie*, "is a perfect reposition of the uterus, which is explained by the fact that the larger anterior convex surface is so reduced in size by this high excision that it becomes smaller than the posterior concave."

. Through the resulting cicatrization the organ is drawn upward into its normal position. The author's observations and experiments were interrupted by his untimely death, so that the number of recorded operations only amounts to six. In four of these the result is stated as *nil*, in the other two doubtful. In reviewing the reports of the cases in which it is naively acknowledged that the extensive cicatricial contraction frequently led to stenosis of the cervical canal and resulting dysmenorrhœa, the reader will be led to wonder not so much at the heroism of the surgeon, as at his faith in the efficacy of an operation

which savors more of the dark ages than of modern scientific gynaecology.—*Berliner klin. Wochensch.* 1886. No. 18.

VIII. Hofmeier's Statistics of Operations for Cancer of the Uterus. Discussing the question of the radical cure of malignant disease of the cervix uteri before the Berlin Obstetrical and Gynecological Society, Hofmeier compares the result of operations after periods varying from one to five years. The reported cures after total extirpation amounted to 48%; at the end of the third year only 14% of the patients remained free from the disease. He concludes that in 45% of the suitable cases of supra-vaginal amputation no recurrence is observed, so that these patients may be fairly considered as cured. He believes that if the above operation has been thoroughly performed the disease rarely returns within a year, and then nearly always in the peritoneal tissues. When, he says emphatically, a year after operation there is no evidence of a local recurrence, it may be safely affirmed that there will never be any. To this rule he has seen only four exceptions among forty-five cases.

XI. Castration in the Treatment of Cavertous Myofibromata of the Uterus. Dr. GOLDENBERG lays particular stress upon the application of the so-called "Hegar's operation" to cases of uterine fibroids in which the tumor is recognized as a soft interstitial growth, with a rich vascular supply. In this class of tumors the entire uterus is diseased, and hæmorrhage is a prominent and dangerous symptom, because of the excessive congestion which attends each menstrual period. The writer believes that production of the premature menopause as well as a marked decrease in the size of the tumor, are results more invariably obtained when the fibroid is of the soft or cavernous variety, than when it is hard and less intimately connected with the uterus. The size of the tumor as well as the age and general condition of the patient do not affect the value of the operation.—*Centbl. f. Gynak.*

X. Vaginal Hysterectomy for Cancer. Prof. SCHULTZE (Jena). Schultze gives the results of three abdominal and nine vaginal hysterectomies, and deduces from them certain practical lessons, viz.:

If the cervix alone can be amputated at a point 1 centimetre above the upper limit of the disease, as felt by the finger, then amputation is to be preferred to total extirpation. If, however, the posterior *cul de sac* is opened during the former operation, then the surgeon should not hesitate to remove the entire organ. [This is opposed to the teaching that opening of the peritoneal cavity during operations on the cervix is a comparatively innocuous proceeding].

Before undertaking the operation, after the patient is anæsthetized, a thorough examination should be made by the rectum, vagina and bimanually, in order to discover the extent to which the surrounding tissues have been invaded. It is impossible to decide positively on this point, since in some cases the distal portions of the broad ligaments may be affected, while the areas immediately adjacent to the uterus are not diseased.

S. believes that the diagnosis of cancer of the corpus uteri can be made more positively by introducing the finger through the dilated os than by examining microscopically fragments removed by the curette. —*Deutsch. Med. Zeit.* 1886. No. 24.

XI. Retention of a Fœtus in One Horn of an Uterus Bicornis; Extirpation of the Pregnant Horn. Dr. WIENER. The patient was æt. 29 and had borne two children, the last, seven years before. Her menses ceased in December, 1883, and the fœtal movements were felt for the last time in September, 1884. The woman's health began to decline, and a month later she was seized with severe pains in the left side of the abdomen, accompanied by uterine hæmorrhage which persisted for three weeks. When received into the hospital and examined under ether, it was found that the uterus was displaced to the left by a smooth, hard tumor, which filled the pelvis and the lower portion of the abdomen.

In the posterior fornix was a mass resembling a fœtal head; the growth appeared to be attached to the uterus by a thick, short pedicle.

The probable diagnosis of extra-uterine pregnancy was made, and laparotomy was performed. The tumor was found to be the right horn of a double uterus, containing a mature foetus in a state of beginning maceration. The mass was ligated and removed in the same manner as an ovarian cyst. There was profound shock for five days, with rapid, feeble pulse, vomiting and moderate rise of temperature. The patient then rallied and was discharged, cured, at the end of four weeks.

An examination previous to her departure revealed the presence of a left horn 6 cm. in length, with a vertical septum, which had formerly separated it from the right. Involution proceeded normally and three months later the uterus had returned to the normal size of the organ at that time.

Commenting upon this case the writer believes that its result, if left to its natural course, would have been disastrous since the foetus would have become decomposed, and rupture of the sac with escape of its contents into the peritoneal cavity would have been a not unlikely occurrence. Operative interference is clearly indicated, since the prognosis is favorable. The stump should be treated intraperitoneally in every instance, unless there are evidences of advanced decomposition of the foetus.—*Archiv. f. Gynak.* Bd. XXVI. Hft. 2.

XII. Italian Statistics of Vesico-Vaginal Fistula. Dr. MORISANI. The author reports fifty cases of fistula. One hundred and eleven operations were performed, forty-one patients being cured and seven relieved. There were two deaths from septicæmia. Sims' operation was the one performed in most instances, the silver suture being preferred.—*Annali di Ostet.*

XII. Gradual Amputation of an Inverted Uterus by Means of a Ligature. Dr. PONCET. The inverted uterus was drawn downward as far as possible with a volsella and a stout silk ligature was passed around the pedicle of the tumor, and the ends attached to a *serre-nœud*. The cord was tightened until the patient (who was not anesthetized) complained of feeling a slight pain. The vagina was thoroughly disinfected before and after the operation, and

was packed with iodoform gauze. The ligature was tightened a little each day, the patient experiencing but a moderate amount of discomfort and having an insignificant rise of temperature. A large slough came away on the eleventh day, and on the twenty-third a vaginal examination revealed no trace of the uterus, but only a transverse linear cicatrix in the roof of the vagina.—*Arch. de Tocologie*. 1886. April.

H. C. COE (New York).

SYPHILIS.

I. Necrosis of Clavicle of Syphilitic Origin. Sub-Periosteal Resection. By M. GILLETTE (Paris). In this operation, which was performed on account of necrosis attributed to syphilis, all but the inner 3 cm. of the bone was removed. It is noteworthy for the reproduction of a bridge of new bone connecting the sternum and the scapula, and for the complete restoration of all movements.

The patient contracted syphilis at the age of 17, was treated for a few weeks, and suffered only from slight reminders until July, 1884, when he was 25 years old. Then without apparent cause a swelling formed over the middle of the R. clavicle, and in a short time several sinuses led down to dead bone. Keeping within the periosteum M. Gillette sawed through the bone at its inner healthy end, and extracted, without any material hæmorrhage, the remainder, which was found to contain three sequestra. The wound healed quickly. It may be doubtful whether the necrosis was really syphilitic, no special search was made as to tubercle. In the subsequent discussion a similar case in which an equally successful operation was performed was mentioned, whilst M. Trélat maintained that the right treatment was to remove the sequestra and not to excise the whole bone; he admitted, however, the complete success of the operation. M. Tillaux (*Anat. Topograph.* P. 479) describes the case of a Parisian writer who in spite of a pseudarthrosis in one clavicle suffered no inconvenience except when carrying heavy weights on that shoulder.—*Bull. de la Soc. de Chirurgie*. March. 1886.

II. Treatment of Chronic Gonorrhœa by Means of Grooved Bougies. By Dr. LEOPOLD CASPER (Berlin). The author asserts that he has, by the daily passage of large nickel-plated bougies (Nos. 18 to 23 Charrière), succeeded in curing about fifty inveterate cases of gleet. Each bougie has a series of six longitudinal grooves which are charged with an astringent salve. After various trials he found the best astringent to be nitrate of silver, which is mixed in the proportion of 1.5 grms. to 100 of cacao butter and two of balsam of copaiba. The cacao butter must be only just melted for fear of reducing the silver by over-heating. Each bougie is left in the urethra for from a few minutes to an hour, depending on the patient's tolerance.

Casper agrees with the generally held opinion that gleet usually arises from chronic inflammation in the bulbous portion, and that it implies a threatening stricture, hence he insists upon the use of large bougies. The rare cases of "gonorrhœa posterior" (implicating the membranous and prostatic portions) he heals by pushing the bougie further into the urethra. In order to diagnose the latter condition he makes the patient pass his urine into two vessels consecutively, if both contain flakes and films of white deposit he infers its existence. If only "gonorrhœa anterior" (situated in front of the triangular ligament) only the urine first passed will contain the deposit. Tenesmus is an uncertain sign in chronic gonorrhœa posterior.—*Lancet*. Feb. 6, 1886.

J. HUTCHINSON, JR. (London).